

### **REMARKS/ARGUMENTS**

Applicants have carefully reviewed the Examiner's Office Action dated May 12, 2005, in which the Examiner rejected claims 10-13 under 35 U.S.C. 112, second paragraph; and claims 1-3 and 14 under 35 U.S.C. 103(a) as being unpatentable over O'Neill(US 5,672,289) or Schawe et al.(US 6,170,984).

#### **Amendments to the Claims**

Claims 1-3 and 14 have been amended to overcome 103 rejection; claim 10 has been amended to overcome 112 rejection (by positively reciting the measuring step); and claims 4, 6 and 8 have been rewritten in independent form.

#### **Claim Rejection under 35 U.S.C. 103(a)**

The rejection of claims 1-3 and 14 under 35 U.S.C. 103(a) in view of USPN 5,672,289(O'Neill) or 6,170,984(Schawe et al.) is respectfully traversed on the grounds that O'Neill and Schawe et al. fail to disclose or suggest an apparatus for measuring heat dissipation of a target heating element as recited in claims 1 and 14, in which:

- 1) the object of the apparatus is to measure heat dissipation of a target heating element(as supported in page 3 line19 – line 25 of the present specification).  
Instead, O'Neill and Schawe et al. disclose calorimetric analytical instruments which measure differential power between sample and reference materials. The calorimetric analytical instruments calculate physical properties of the sample material, e.g., melting point, glass transition temperature, fusion heat and reaction heat. Accordingly, the apparatus of the present invention and the calorimetric analytical

instruments are completely different;

- 2) the apparatus measures heat dissipation of the target heating element by using the similarity law.

The concept of the similarity law is that heating values or heat dissipation of two objects, which have the same outer configuration and sizes and which are in the same surroundings, are identical to each other if their representative temperatures are equal to each other (as supported in page 6 line 15 – line 22 of the present specification). In contrast, in O'Neill and Schawe et al., the reference material is different from the sample material. Otherwise, the reference is the empty container. Accordingly, it is clear that the calorimetric analytical instrument does not use the similarity law.

- 3) the target heating element of the present apparatus emits heat by itself, *i.e.*, the target heating element is not controlled by a control unit.

Instead, a reference heater (which corresponds to the target heating element) is controlled by a heater control circuit (which corresponds to the control unit).

Accordingly, O'Neill and Schawe et al. do not disclose or suggest any of inventive features of the claims 1 and 14 described above, and withdrawal of the rejection of claims 1 and 14 under 35 USC 103(a) is respectfully requested.

It is also believed that claims 2 and 3, which directly or indirectly depend on amended claim 1, are allowable for the same reasons indicated with respect to the claim 1, and further because of the additional features recited therein which, when taken alone and/or in combination with the features recited in claim 1, remove the invention defined therein further from the disclosures made in the cited references.

CONCLUSION

Applicants believe that this is a full and complete response to the Office Action. For the reasons discussed above, applicants now respectfully submit that all of the pending claims are in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 1-14 be allowed in their present form.

Should the Examiner require or consider it advisable that the specification, claims an/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,  
BACON & THOMAS, PLLC

  
By: BENJAMIN E. URCIA  
Registration No. 33,805

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BACON & THOMAS, PLLC  
625 Slaters Lane, 4th Floor  
Alexandria, Virginia 22314

Telephone: (703) 683-0500